	Application No.	Applicant(s)
Notice of Allowability	10/691,474	LU, KUN
	Examiner	Art Unit	
	M. R. Sedighian	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10/21/03*.

2. ☒ The allowed claim(s) is/are *1-29*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

M. R. SEDIGHIAN
PRIMARY EXAMINER

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Daniel Mao on 1/11/07.

2.   IN THE SPECIFICATION

a)   In specification, page 19, line 1, the reference numeral "1660" has been changed to

--- 160 ---.

b)   In specification, page 19, line 3, the reference numeral "294" has been changed to

--- 394 ---.

c)   In specification, page 19, line 4, the reference numeral "296" has been changed to

--- 396 ---.

d)   In specification, page 22, line 25, the phrase "the third" has been changed to ---the first---

3.   The following is an examiner's statement of reasons for allowance:

        As to claims 1-10, the prior art of Saleh et al. (US Patent Application Publication No:

2003/0058804 A1), Saxon et al. (US Patent Application Publication No: 2004/0120270 A1), and

Mor et al. (US Patent Application Publication No: 2002/0186667 A1) do not fairly teach or

suggest a method for generating a ring map for optical network applications, comprising: sending

a first discovery message to a first node through a portion of an optical network, the first node

corresponding to a first node identification and a first predetermined identification, the first

discovery message including at least a source node identification associated with a source node,

a source predetermined identification associated with the source node, and a first ring

connectivity map; processing at least information associated with the source node identification

and the first node identification; if the source node identification and the first node identification

are different, updating the first ring connectivity map; if the source node identification and the

first node identification are identical, processing at least information associated with the source

predetermined identification and the first predetermined identification; if the source

predetermined identification and the first predetermined identification are different, sending a

first alarm message indicating multiple assignment of the source node identification.

As to claims 11-17 and 22-23, the prior art of Saleh et al. (US Patent Application

Publication No: 2003/0058804 A1), Saxon et al. (US Patent Application Publication No:

2004/0120270 A1), and Neuendorff et al. (US Patent No: 6,657,969 B1) do not fairly teach or

suggest a method for validating a ring map for optical network applications, the method

comprising: sending a first validation message from a source node through at least a portion of

an optical network, the source node associated with a first ring map, the first validation message

including at least a source node identification associated with the source node and a first ring

connectivity map associated with the source node, the first ring map including at least

information associated with the source node identification and the first ring connectivity map;

receiving the first validation message at a first node directly from the source node, the first node

associated with a second ring map; processing at least information associated with the source

node identification and the second ring map; if the source node identification is not associated

with a predetermined node, sending a first initialization message; if the source node

identification is associated with the predetermined node, processing at least information

associated with the first ring map and the second ring map; if the first ring map and the second

ring map are inconsistent, sending a first alarm message.

As to claims 18-21, the prior art of Yamada (US Patent Application Publication No:

2002/0114031 A1), Mor et al. (US Patent Application Publication No: 2002/0186667 A1), and

Kato et al. (US Patent Application Publication No: 2005/0254429 A1) do not fairly teach or

suggest a method for processing a discovery message for optical network applications, the

method comprising: sending a first discovery message to a first node through a portion of an

optical network, the first node associated with a first node identification and a first

predetermined identification, the first discovery message including at least a source node

identification associated with a source node, a source predetermined identification associated

with the source node, and a first ring connectivity map; if the first node includes a second ring

map, processing at least information associated with the second ring map and the source node

identification; if the source node identification is absent from the second ring map, sending a first

initializing message; if the first node is free from the second ring map, processing at least

information associated with the source node identification and the first node identification; if the

source node identification and the first node identification are different, updating the first ring

connectivity map and sending the first discovery message to a second node; if the source node

identification and the first node identification are identical, processing at least information

associated with the source predetermined identification and the first predetermined identification;

if the source predetermined identification and the first predetermined identification are different, sending a first alarm message indicating multiple assignments of the source node identification.

As to claims 24-27, the prior art of Condict et al. (US Patent No: 6,850,708 B2), Kato et al. (US Patent Application Publication No: 2005/0254429 A1), and Neuendorff et al. (US Patent No: 6,657,969 B1) do not fairly teach or suggest an apparatus for generating a ring map for optical network applications, the apparatus comprising: a message receiver configured to receive a first discovery message, the first discovery message including at least a first node identification associated with a first node, a first predetermined identification associated with the first node, and a first ring connectivity map; a message sender configured to send an alarm message and send a second discovery message, the second discovery message including at least a second node identification associated with a second node, a second predetermined identification associated with the second node, and a second ring connectivity map; a memory system configured to store at least information associated with a ring map; a processing system coupled to the message receiver, the message sender, and the memory system and associated with a third node identification and a third predetermined identification; wherein the processing system is configured to process at least information associated with the first node identification and the third node identification; if the first node identification and the third node identification are different, update the first ring connectivity map; if the first node identification and the third node identification are identical, processing at least information associated with the first predetermined identification and the third predetermined identification; if the first predetermined identification and the third predetermined identification are different, instruct the message sender to send the alarm message indicating multiple assignments of the first node identification.

As to claims 28-29, the prior art of Condict et al. (US Patent No: 6,850,708 B2), Kato

et al. (US Patent Application Publication No: 2005/0254429 A1), and Neuendorff et al. (US

Patent No: 6,657,969 B1) do not fairly teach or suggest an apparatus for validating a ring map

for optical network applications, the apparatus comprising: a message receiver configured to

receive a first validation message, the first validation message including at least a first node

identification associated with a first node and a first ring connectivity map associated with the

first node, the first validation message associated with a first ring map including at least

information associated with the first node identification and the first ring connectivity map; a

message sender configured to send an initialization message; send an alarm message; send a

second validation message, the second validation message including at least a second node

identification associated with a second node and a second ring connectivity map associated with

the second node, the second validation message associated with a second ring map including at

least information associated with the second node identification and the second ring connectivity

map; a memory system configured to store at least information associated with the second ring

map; a processing system coupled to the message receiver, the message sender, and the memory

system and associated with the second node identification and the second predetermined

identification; wherein the processing system is configured to process at least information

associated with the first node identification and the second ring map; if the first node

identification is not associated with a predetermined node, send the initialization message; if the

first node identification is associated with the predetermined node, process at least information

associated with the first ring map and the second ring map; if the first ring map and the second

ring map are inconsistent, instruct the message sender to send the alarm message.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

4.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Saleh et al. (US Patent Application Publication No: 2003/0058804 A1) is cited to show a

method of provisioning virtual paths between plurality of nodes of a network by identifying the

nodes of the network, discovering physical path between the nodes, and establishing virtual paths

between the nodes (page 3, paragraphs 0026, 0027, 0028, page 22, claims 1, 9 and figs. 1, 2).

Saxon et al. (US Patent Application Publication No: 2004/0120270 A1) is cited to show

a system and method for enhanced SONET network analysis (page 2, paragraph 0017, page 3,

paragraphs 0018, 0022, page 4, claims 1, 2, 3, 4, 5 and figs. 1, 3, 5).

Neuendorff et al. (US Patent No: 6,657,969 B1) is cited to show an optical SONET ring

network (110, 120, fig. 1) which generates ring map (col. 3, lines 35-65, col. 4, lines 1-67 and

figs. 6, 7, 8).

Yamada (US Patent Application Publication No: 2002/0114031 A1) is cited to show a

ring configuration method and generation of ring map (page 1, paragraphs 0013, 0014, 0016,

page 2, paragraphs 0017, 0022, 0024, page 3, paragraphs 0045, 0050, 0053 and figs. 1, 2, 4, 12)

Mor et al. (US Patent Application Publication No: 2002/0186667 A1) is cited to show a

ring network (46, fig. 4), wherein a node sends topology discovery packet around the ring (page

3, paragraphs 0041, 0042, page 4, paragraph 0043, page 5, claims 1, 5, 7 and fig. 5).

Kato et al. (US Patent Application Publication No: 2005/0254429 A1) is cited to show

a network configuration management systems and method (page 1, paragraph 0001) that include

identification information about the node devices participating in the network (page 2, paragraph

0018, 0019, page, 6, paragraphs 0095, 0096, 0097, 0098 and figs. 1, 2, 3, 5A, 5B, 9, 11).

Condict et al. (US Patent No: 6,850,708 B2) is cited to show an optical network

management system in which each network element stores identification and status information

related to each of the other elements in the network (col. 1, lines 9-12, col. 2, lines 9-29, 50-61,

col. 4, lines 13-20, 62-67, col. 5, lines 1-13 and figs. 1, 2, 3).
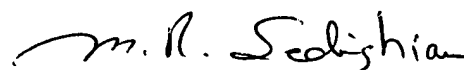

5.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. R. SEDIGHIAN
PRIMARY EXAMINER